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        310017 ORGANIC
        238246 IONIC
       1362956 GROUP
             0 ORGANIC IONIC GROUP
                 (ORGANIC(W)IONIC(W)GROUP)
         13283 AMPHIPHILIC
L1           0 PIGMENT AND STERIC AND ORGANIC IONIC GROUP AND AMPHIPHILIC

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L2   ANSWER 1 OF 1  HCAPLUS  COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER:         2001:265513  HCAPLUS
DOCUMENT NUMBER:          134:297228
TITLE:                    Modified pigments having steric and
                          amphiphilic groups
INVENTOR(S):              Belmont, James A.
PATENT ASSIGNEE(S):       Cabot Corporation, USA
SOURCE:                   PCT Int. Appl., 37 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

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         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CR, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU,
             ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU,
             LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD,
             SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA,
             ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
             CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     EP 1220879         A1   20020710       EP 2000-967166   20000929
     EP 1220879         B1   20030507
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL
     JP 2003511513      T2   20030325       JP 2001-528499   20000929
     AT 239770          E    20030515       AT 2000-967166   20000929
PRIORITY APPLN. INFO.:                    US 1999-157284P  P  19991001
                                          WO 2000-US26957  W  20000929
AB   Various modified pigment products are described which are
     preferably capable of being dispersed in a variety of materials such as
     coatings, inks, toners, films, plastics, polymers, elastomers, and the
     like.  The modified pigments are pigments having attached (a) at least one
     steric group and (b) at least one organic ionic group and
     at least one amphiphilic counterion, wherein the
     amphiphilic counterion has a charge opposite to that of the organic
     ionic group.  In addition, inks, coatings, toners, films, plastics,
     polymers, elastomers, and the like containing the modified pigment
     products of the present invention are described.  Methods of making the
     modified pigment products are also described.  Thus, mixing 600
     g carbon black (surface area 200 m2/g; DBP absorption 117 mL/100 g) with
     31.5 g sulfanilic acid, adding a solution of 6.2 g of NaNO2 in 600 g of
     water, mixing for about 10 min, and drying in an oven at 70° gave a
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carbon black bearing 0.22 mmol C6H4SO3Na groups, 20 g of which was combined with 26.9 g H2NC6H4CO2(C3H6O)nC4H9 and 2.3 g methanesulfonic acid in a mixture of 50 mL water and 150 mL 2-butanone, stirred at room temperature for 1 h and at 60° for 1 h, mixed with a mixture of 4-CH3CH(NH2)C6H4(OC3H6)30OH 7.5, methanesulfonic acid 0.38, water 40 and 2-butanone 40 g, stirred for 1 h and worked up to give a carbon black bearing polymeric group and **amphiphilic** salt of C6H4SO3- group.

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT